Soybeans and Vitamin B_1

Broadcast by Miss Ruth Van Deman, Bureau of Home Economics, and Mr. Wallace Kadderly, Office of Information of the Department of Agriculture period of the National Farm and Home Hour, Tuesday, April 1, 1941, by the National Broadcasting Company and associated Blue Network stations.

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WALLACE KADDERLY:
Here we are in Washington, no foolin', even though this is April first. And no hokus-pokus either, here's Ruth Van Deman, back with us again on Tuesday ------her regular day to give us news from the Bureau of Home Economics. All right, Ruth, shall we go on with the head lines for homemakers?

RUTH VAN DEMAN:
Headlines? I'll have to do some quick streamlining to turn these notes on soybeans and Vitamin B_1 into headlines.

KADDERLY:
Soybeans-----Vitamin B_1. Are you putting those two together?

VAN DEMAN:
Nature did it, goodness knows how many centuries ago.

KADDERLY:
You mean that along with all the other remarkable things about soybeans, they're full of Vitamin B_1---the B_1 everybody's talking about?

VAN DEMAN:
So the nutrition chemists say. So Dr. Booher found--- Dr Lela Booher, who's in charge of our nutrition laboratories, you know.

KADDERLY:
Yes, I know Dr. Booher and her work---By the way, I understand when she moved her white rats out to their new quarters at the Beltsville Research Center, they rode in heated ambulances with a motor escort.

VAN DEMAN:
That's true. The white rats used for nutrition tests are very sensitive to a sudden change in temperature, you know. In fact, they can't stand extreme heat or extreme cold. They curl up their toes and die.

And if you remember the day the white rats were moved to Beltsville we had a young blizzard.

KADDERLY:
I do remember that.

(Over)

VAN DEMAN:
The nutrition people were afraid the rats would catch cold and get pneumonia. A colony of 3000 white rats carefully bred and fed are the source of extremely valuable scientific data.

KADDERLY:
Scientific data that can be translated over into diets for us humans---- that give us facts to help us feed ourselves better.

VAN DEMAN:
Exactly. For instance, this fact about the Vitamin B_1 in the soybeans. That's just one of a whole series of tests Dr. Booher made to find what foods have Vitamin B_1 and how much. She used the white rats to test over 70 kinds of common foods.

KADDERLY:
I didn't realize there were 70 different kinds of common foods.

VAN DEMAN:
Oh my yes. Sit down with your vegetable seed catalog, and you'll find you can count over 50 different vegetables.

KADDERLY:
Which reminds me, I've been meaning to look up the garden varieties of soybeans. Are they widely available from the seed houses yet?

VAN DEMAN:
They're listed in some seed catalogs, not all. I asked Mr. Morse about that just this morning.

KADDERLY:
William J. Morse, in the Bureau of Plant Industry?

VAN DEMAN:
Yes, the soybean man.

KADDERLY:
You're right he's the soybean man. He practically fathered soybean research in the Department of Agriculture.

VAN DEMAN:
Yes, it was through him Dr. Booher got her samples of the garden varieties of soybeans to test for Vitamin B_1. Also it was in cooperation with Mr. Morse that Mrs. Whiteman and the others did the cooking tests on soybeans and worked out the recipes in the soybean leaflet.

KADDERLY:
Remind me, Ruth, to ask you about that leaflet before you leave the microphone.

VAN DEMAN:
It's available if that's what's on your mind.

KADDERLY:
Yes, I was thinking that some of our Farm and Home friends might like a copy of that leaflet on cooking soybeans. That is, if they have a chance to grow some of the new table varieties of soybeans in the garden this summer.

VAN DEMAN:
The fresh green soybeans are delicious, we think---and just as easy to cook as fresh limas. The soybeans have a richer, more nutty flavor than any other members of the bean family.

KADDERLY:
The oil in them would account for that, probably. Soybeans are richer in fat than any other beans or peas.

VAN DEMAN:
All the beans and peas have remarkably good rating on Vitamin B_1, or thiamin, as it's often called.

KADDERLY:
That's the vitamin that nature's been rather stingy with. At least I think that the way Dr. Wilder put it the day he broadcast with you about the new enriched flour and bread.

VAN DEMAN:
Yes, Dr. Booher's studies show that very definitely. Out of all the 70 or so foods tested, she rated only 15 as good or excellent sources of thiamin.

KADDERLY:
But all the peas and beans got a place among those 15.

VAN DEMAN:
All the varieties she tested, yes. Soybeans, lima beans, navy beans, green peas, cowpeas. Oh yes, and peanuts---another of the same tribe.

KADDERLY:
The peanut seems to be the queer member of the legume family---with its funny habit of burying its seed pod under ground and growing its seeds down there out of sight.

VAN DEMAN:
But it's a seed all the same. And it's because these beans and peas and nuts are seeds that they're so rich in Vitamin B_1. Nature's done the same thing for the cereal grains--wheat, rice, corn, oats, rye, barley. The outer coats of all those grains contain lots of B_1 to help the young plants grow as soon as the grain begins to sprout.

KADDERLY:
There seems to be something about Vitamin B_1 that generates drive---energy---the power to produce.

VAN DEMAN:
You're right. That's why vitamins and nutrition are part of our defense program. Our friend Dr. Wilder put it something like this in a speech he made the other day:

"The will to work....the will to sacrifice privileges, depends on the food we eat. For instance, if we don't have enough Vitamin B_1, thiamin, in our daily meals, we'll lack ambition. We'll be careless---slovenly--we won't have the will to get things done."

But of course there's much more in the nutrition picture than thiamin. Dr. Wilder was concentrating on that as part of the scientific background for the new enriched flour. He was explaining why they're putting back into the flour the food values that have been stripped from the natural wheat berry.

KADDERLY:
But as you've pointed out here, wheat and the cereal grains are not the only food that B_1 grows in naturally.

VAN DEMAN:
I'm sorry we haven't time to go down the whole list. Considering the number of potatoes we eat, they're quite a valuable source of thiamin to us. And pork is outstanding among the meats.

KADDERLY:
Does that mean ham as well as fresh pork chops?

VAN DEMAN:
Yes, the lean meat of cured pork and fresh pork. Of course, curing and processing foods destroys some of the B_1. And so does ordinary cooking. But some of that just can't be helped.

KADDERLY:
Our stomachs aren't exactly equipped to deal with nothing but raw foods.

VAN DEMAN:
It seems not. So we have to use our brains to save our vitamins where we find them.

And, by the way, soda is one thing that does <u>not</u> get along with Vitamin B_1. Dr. Booher found that using soda in cooking dry beans destroyed over half of their Vitamin B_1 value.

KADDERLY:
Well, as usual, Ruth, you've given us a lot to think about and remember to practice in our daily diet.

And Farm and Home friends, just to repeat the mention of that leaflet on soybeans----Ruth, what's the exact title?

VAN DEMAN:
"Soybeans for the Table". But Soybean leaflet sent to the Bureau of Home Economics is enough.

KADDERLY:
(ad lib --- directions for obtaining this leaflet and that it contains information on the use of garden varieties of soybeans as food for humans --- cooking and food value)

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